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HEADLINE; PART 3; OLDER WOOD FRAMEWORK

In the previous two columns on this series on older homes we covered an introduction and foundations. This week we progress past the cellar and discuss the framework of the vast majority of century homes. While stone and all brick homes dot the landscape, they made up less than a quarter of homes assembled by the turn of the 20th century. Developments in sawing and better capacity, access to an ample supply of timber, coupled with the evolution of balloon framework by the late 1800's dictated that most homes were of wood construction. The early homes were log assembly of evolving methods, dovetailed, chinked and splined timbers were used and there are still a number of these homes in existence today. There has actually been a revival in these homes in recent years. The early wood frame homes in Upper Canada were assembled using a timber frame style of which there are two common construction methods. The bent style was used in barns and some homes. The supporting sections or bents as they were called were assembled and then attached together. "Barn Raising" was a popular social gathering and this was when the assembled bents were raised with help of the neighbouring farmers. The other method is Braced Timber Frame and this method was more popular for homes. The term post and beam is often used for this method and there are a number of different renditions of this method. Local builders would put their own stamp on the assembly and I have seen variations of timber frame buildings literally from one township to another. The majority of wood frame homes up until the early 1870's were built with one of these methods. Once balloon frame came into its own it dominated the wood frame assembly well into the 1930's before Platform Frame was developed and we use an updated method of platform frame for homes today.

How do you establish what type of framework an older home is when it is finished on the inside? There are a number of quick methods if you have reasonable access. The fastest way to check for balloon framework is to get in the attic and take a look at the gable ends. If they are sawn lumber with reasonably even spacing this is often a good indication. There are some braced timber frames that look like this though, so do not take this as the final answer. If there are any of the original windows in the home, how many panes of glass are they. If they are multiple panes in the windows is probably a timber frame, if they are four panes, this was more common in the later part of the 19th century. Capacity for larger panes of glass was possible but limitations in shipping dictated the size of these panes for most windows until the mid 1800's. A look at the cellar may help, if the floor joists are evenly sawn material and not hand squared timber beams there is a pretty good chance it is a balloon frame home. If there are large hand squared wood timbers resting upon the foundation this does not automatically designate it as a timber frame home though as this method was used in some cases for both styles. I have seen cases where only opening up the walls can you fully determines the method of assembly.

What are the areas of concern in an older wood frame home? By far the largest area of concern is where the wood contacts the foundation or the ground. This is where the sill beam or plate beam as it is sometimes called takes the brunt of the weather, sometimes the landscaping has been raised and it now covers the exterior siding and dampness in the cellar all add to the decay of this very important structural member. This can be a very costly repair. If you are permitted, take an ice pick and probe this beam if it is accessible. If some softness is noted you must remember that the home is old, however there is a point where age deterioration and decay become a factor and here investigation by a reputable heritage contractor or a home inspector with a strong heritage background is a wise move.

The other area that I see is a sag in the floor and here the majority of cases can be explained as to the lack of support and the method of construction. Our forefathers understood that if the timbers were large enough they would support the home, what they did not fully understand was the amount of deflection a sawn or hand-hewn log has versus a laminated beam. Often addition of extra support by means of a new beam or strategically located metal jack posts can stabilize the problem. Here again a second opinion is a wise idea. The use of large timbers for floor beams that were notched or mortised into the main beam was very common. These were

trimmed to fit and level and I have seen more than one case where an 8" or 10" floor beam has been trimmed to 5" or 6" to fit and this causes a pressure crack or check over time that makes the floor sag to the outside wall. The use of additional support here is often used but should be investigated first for integrity of the actual sill beam and floor beam.

Lastly, go outside the home and walk across the street. Sight the exterior walls using another building or post and see if it appears plumb and square. Balloon frame buildings are known for a bow in the middle of the wall given their assembly, here again the amount of bow is important and can be a structural issue. Find a reputable heritage inspector or contractor and have him go thru these areas with you. I have never seen an older home that could not be fixed; it comes down to what is needed immediately and what can wait.

Now the answer to last week's question. What is a quarter? It was B) the Olde English term for a wooden stud. Now this week's question. What is a Portico? Is it A) a type of heritage window B) a method of plastering ceilings C) a style of wooden door D) a porch with pillars or columns. The answer next week's column.

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